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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/835,072   | 04/13/2001  | David R. Goodlett    | P-IS 4584           | 3882             |
| 23601  | 7590        | 12/15/2003           | EXAMINER            |                  |
| CAMPBELL & FLORES LLP<br>4370 LA JOLLA VILLAGE DRIVE<br>7TH FLOOR<br>SAN DIEGO, CA 92122 |             |                      | MAHATAN, CHANNING   |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1631                |                  |
| DATE MAILED: 12/15/2003  |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary****Application No.**

09/835,072

**Applicant(s)**

GOODLETT ET AL.

**Examiner**

Channing S Mahatan

**Art Unit**

1631

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 30-55 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 5-29 is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☒ Claim(s) 1-55 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### *APPLICANTS' ARGUMENTS*

Applicants' arguments filed 08 August 2003, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### *CLAIMS UNDER EXAMINATION*

Claims herein under examination are claims 1-29. Claims 30-55 remain withdrawn from examination as not directed to the elected invention.

### **Claims Rejected Under 35 U.S.C. § 112 2<sup>nd</sup> Paragraph**

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as necessitated by amendment.

### *VAGUE AND INDEFINITE*

Claim 2 (lines 3-7) and all claims dependent therefrom has been amended to replace step labels (a) and (b) with step labels (c) and (f), however, said labels are confusing in view of Applicants' arguments. Applicants' state the specification teaches that step (a) and (b) as originally set forth in claim 2 can be performed in any order with respect to each other, as well as with respect to steps (a) creating a source node with total mass M, total number of labels N and

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fixed intensity  $I_s$ ; or (b) creating a terminus node with mass 0, minimum number of labels  $n_0$  and fixed intensity  $I_t$ , which can be employed to derive information from boundaries of the nodes, can be performed simultaneously with, or at a point after, step (a) of claim 1. Applicants' point to page 54, lines 8-12 of the specification for support which states the following:

"The boundaries of the nodes can be utilized by creating a source node with mass  $M$ , number of labels  $N$ , and fixed intensity  $I_s$ , ( $M, N, I_s$ ). Also, a terminus can be created node with mass 0, minimum number of labels  $n_0$ , and fixed intensity  $I_t$  ( $0, n_0, I_t$ )."

However, the claims as written do not reflect Applicants' intended above arguments. The claims as written indicate steps (e) and (f) of claim 2 are performed after step (d) of claim 1 without any further indication of the utilization of the source node and terminus node after creation. Absent is any indication, within the language of claim 2, that steps (e) and (f) are optionally (i.e. can be utilized) performed "simultaneously with, or at a point after, step (a) of claim 1". Further, the specification fails to support the creation of a source node and a terminus node "simultaneously with, or at a point after, step (a) of claim 1". The "can be utilized" language as indicated in Applicants' reference to the specification does not make apparent "simultaneously with, or at a point after, step (a) of claim 1". Clarification of the metes and bounds, via clearer claim language, is requested.

Claim 3 (line 2) recites the step "selecting a path from the source node to the terminus node" which is vague and indefinite in view of the amendments to claim 2 (from which claim 3 depends from). It is unclear once a path is selected what one is to do with said selected path? Is the selected path to be utilized in any of steps (a), (b), (c), and/or (d) of claim 1 for the assignment of a satisfying amino acid? Is the selected path to be utilized to compute a priority

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score (i.e. claim 4)? Clarification of the metes and bounds, via clearer claim language, is requested.

Claim 4 (line 2) recites the step of “computing a priority score for each path through the graph” which is vague and indefinite in view of the amendments to claim 2 (from which claim 4 depends from). It is acknowledged claim 4 indicates the computation of a priority score for each path through the graph. However, after the priority score is computed it is unclear what one is to do with said priority score? For example, is the priority score to be utilized in any of steps (a), (b), (c), and/or (d) of claim 1 for the assignment of a satisfying amino acid? Clarification of the metes and bounds, via clearer claim language, is requested.

*OBJECTION TO CLAIMS*

Claim 2 (line 6) is objected to for failing to end in a period “.”. Applicants’ are requested to correct said claim informality.

*ALLOWABLE CLAIMS*

Claims 1 and 5-29 are found allowable.

*ACTION IS FINAL, NECESSITATED BY AMENDMENT*

Applicants’ amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*EXAMINER INFORMATION*

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 C.F.R. § 1.6(d)). The CM1 Fax Center number is either (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Channing S. Mahatan whose telephone number is (703) 308-2380 (until 12 January 2004) and (571) 272-0717 (after 12 January 2004). The Examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Woodward, Ph.D., can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner, Tina M. Plunkett, whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

Date: *December 8, 2003*Examiner Initials: *CSM*

*Marianne P. Allen*  
MARIANNE P. ALLEN  
PRIMARY EXAMINER  
GROUP 1  
*AU1631*